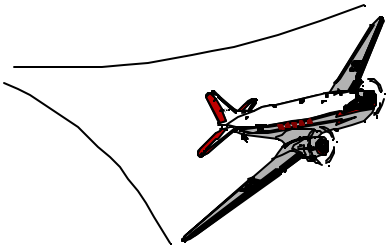
SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department of Transportation

Federal Aviation Administration

Aircraft Certification Service
Washington, DC

No. CE-01-10
January 24, 2001

We post SAIBs on the internet at "av-info.faa.gov"

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you, an owner or operator of Rolls-Royce Corporation (formerly the Allison Engine Company) model 250-C18 series and 250-C20 series engines of recent changes to procedures in the maintenance manuals when servicing the fuel system.

Background

The FAA has received a report of a McDonnell Douglas Helicopter Systems model 369D helicopter with a Rolls-Royce Corporation model 250-C20B turboshaft engine that lost power at approximately 150 feet and autorotated to a forced landing. The subsequent investigation revealed contamination at the fuel pump filter, fuel control unit screen, and the fuel nozzle screen. Three additional loss of power events dating back to 1994 have been associated with some level of fuel system contamination.

To minimize the dangers posed by contaminated fuel, fuel systems should be properly maintained during routine actions, including filter changes. The 300 hour Inspection section of the Allison 250-C20 series Operation and Maintenance manual instructs the technician to perform a fuel pump bypass valve operational check when replacing the fuel pump filter. An informal survey of mechanics revealed that some are not completing this fuel pump bypass valve operational check (an Operation and Maintenance manual requirement) as recommended, but were instead only checking the bypass light (an airframe manual requirement) when changing a filter. If this valve is not completely seated, any contaminants present in the fuel could bypass this first filter undetected. The fuel pump bypass valve operational check identified in the engine Operation and Maintenance manual is a complete test of the system, including the bypass light.

Rolls-Royce Corporation has recently reviewed and updated the fuel system procedures in the maintenance manuals for the 250-C18 series and 250-C20 series engines to make the above procedure more clear.

Recommendation

The FAA strongly emphasizes the importance of maintaining a clean and properly functioning aircraft fuel system. We highly recommend that owners and operators of Rolls-Royce Corporation 250-C18 series and 250-C20 series engines completely follow the actions specified in the maintenance manuals to ensure that the fuel system is properly tested following routine filter changes or suspected contamination.

For Further Information Contact

John Tallarovic, Aerospace Engineer, FAA, Chicago Aircraft Certification Office, Propulsion Branch, ACE-118C; 2300 East Devon Avenue, Des Plaines, IL 60018; telephone: (847) 294-8180; facsimile: (847) 294-7834; e-mail: john.m.tallarovic@faa.gov.